Reflecting on personal and professional energy stories in energy demand research

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Abstract
As researchers involved in projects to reduce energy demand within buildings we may differ in our discipline, approach and epistemology; however we all share in common our experiences of energy demand within our own homes and workplaces. This paper centres on our status as 'insiders' in the research we conduct, exploring its potential impact on the stories of energy we tell through our research. The paper considers ways in which we may craft more creative stories of energy demand by being reflexive researchers, seeking out the 'productive moment of friction' where universalising science meets particular personal experiences. Perspectives on the value of so-called 'anecdote', along with issues of representativeness are discussed. Ultimately the paper argues for greater recognition of and more explicit attention to the relationship between the stories of energy we experience in our own lives, and those we tell through our research. It does so in the hope of encouraging an acceptance of the partiality of all knowledge, a practice of pluralism, and thus opportunities to move beyond dominant discourses in policy, industry and academia of what is necessary in order to reduce the demand for energy in our buildings.

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Complex or 'wicked' problems, such as energy demand in buildings, are increasingly being tackled through interdisciplinary or transdisciplinary research, bringing together teams of building engineers, computer scientists, psychologists and social scientists, plus if transdisciplinary, policy-makers and practitioners [56,14]. It has been suggested that such research should encourage us 'to think more *creatively* and widely about how to imagine response options' [57 p.46, emphasis added] and that through it 'new energy realities' can be 'purposely created through the *clash* of rival energy experiments and agendas' [16 p.10, emphasis added]. Others challenge us with the fact that 'doubt and contradiction rather than certainty are seen to be generative of social change' [66] and urge us to seek out 'that productive moment of friction where universals and particulars meet' [67, p.20]. This paper looks not outwards to the potential creativity of interdisciplinary and transdisciplinary research, but rather inwards, to ourselves as researchers, focusing not on the differences between our disciplines but the commonalities between us through our common experiences as householders and employees, engaging with energy in our own homes, workplaces, and beyond. The paper extends the ideas above to consider the 'clash' of views and the 'doubt and contradiction' which may arise from reflecting on the relationship between our 'particular' personal experiences of energy and our 'universal' professional expertise as energy researchers. It seeks to learn from the 'productive moment of friction' between these two ways of knowing energy, and suggests that this may lead to more 'creative' research responses and thus future 'energy realities' and 'social change'. In other words, it seeks to promote reflexive research which takes into account the necessarily messy nature of engagements with energy (as we all experience in our own lives), but which it may be argued is seldom accounted for fully in our research. It thus responds to calls for energy research and policy to better deal with energy related social practices [25,26,27] and to incorporate lay knowledge and the public (of which researchers are a part) in more transformative ways [3,28,29].

My previous research with academics who explore the possibilities of transforming energy demand through digital innovations [1] suggests that the relationship between the personal and the professional is tacitly recognised and thus implicit in much energy research. Whilst presenting my

findings to a room of around 40 energy researchers at the BEHAVE 2016 conference, I asked the question 'have you ever reflected on your own personal experiences of energy use in your professional research roles?', to which all present put their hand up, indicating that they had. Some readers may express concern at this and see the inclusion of what some might refer to as 'anecdote' as problematic. Others may welcome the 'reality check' offered through this and see it as productive. Others still may already reflect on such personal experiences in structured and conscious ways throughout their research. This paper goes on to consider such perceptions and to discuss issues of representativeness, generalisability, and bias. The aim of this paper is not however to side with any particular perspective; rather it hopes to inspire *explicit* attention to the relationship between personal and professional engagements with energy, and to consider how it may be harnessed productively in energy research. Whilst reflecting on our personal stories of energy is inherently an individual task, there is a common effort involved in accounting for these in the stories of energy that we tell through our research.

This paper hopes to complement those in this Special Issue by highlighting not the stories of others, but rather those of ourselves as researchers – both from our private lives and through the public research we conduct. Our personal stories provide us with a grounded understanding of our own particular engagements with energy, whilst the professional stories we contribute to through our research provide us a channel through which to influence the experience of others. Both our personal and professional stories of energy thus deserve critical attention, particularly given the importance of researcher positionality and the need to recognise the partiality of science. Further, our personal and professional stories deserve to be considered *together*, given that in theory and in practice they intertwine in ways which make them inseparable. The weaving of personal and professional stories of energy in energy demand research raises methodological, ethical and epistemological concerns, and thus this paper should be of interest to many across energy research, policy, and practice.

This commentary paper focuses firstly on researcher positionality and the partiality of science, secondly on so-called anecdote and issues of representativeness, and thirdly and finally on practical ways in which to promote reflexive research.

Researcher positionality and the partiality of science

This paper takes seriously the importance of our positionality as researchers; a concept which bridges the somewhat artificial dichotomy between the 'professional' and the 'personal'. Our positionality reflects our relationship to that which we research and may incorporate our gender, race, age, language, job, or our status as 'insider' or 'outsider', amongst other things [41,42,43]. At a general level (more on this below) we may be considered as 'insiders' in our research, in that we all live in homes in which we use various forms of energy for example. This is important as positionality relates not only to our direct encounters with research participants (for example householders in a research case-study with whom we may be able to bond given our own personal experiences of energy), but also in how we conceptualise an issue, how we conduct our research, and how we attempt to intervene in policy and practice. The recent Special Section in ERSS on the influence of social science in energy policy [44,15,16,17] draws attention to the importance of shifting positionalities, in that case associated with moving jobs from policy to academia and how that enables an understanding of the opportunities for impactful social science. Others draw attention to the importance of gender in energy research [45] and we may imagine many other important facets of our relationship to that

which we research, including our own personal experience of fuel poverty, of domestic or community solar panel installations, of living off-grid, or of relying on improved cook-stoves if coming from many places within the global South. Whilst as energy researchers we have our professional relationship to energy, we cannot escape our personal relations to it too.

Given the importance of positionality, I wish to divulge my own with respect to energy demand research. I am a human geographer who conducts qualitative social science research into the conservation of nature in the natural environment and of energy in the built environment. For the last 3 years I have helped to manage the TEDDINET network (www.teddinet.org), supporting interdisciplinary teams involved in researching the potential of digital innovations in reducing energy demand in the UK. I have found fascinating the casual ways in which these researchers draw on their own experiences when discussing energy demand, for example, the way their son takes *hours* in the shower, or how their grandfather cannot for the life of him grasp digital technologies. And yet I see very little evidence of these insights in their research and they are generally dismissed merely as 'anecdotes'. This led me to conduct the empirical research from which this commentary paper emerges [1]. I must also 'confess' to being personally rather uninspired by energy technologies in my own home – leaving the quantitative monitoring of energy use to my biomass-heating engineer husband! For me, monitoring and managing energy at home arises from my embodied, everyday interactions with the house and my family over time, drawing 'simply' on energy know-how [2]. It is also the result of a conscious choice to live in a small house that is easy to heat and to ensure our electricity and heating needs come from renewable sources. As a researcher, I adopt a constructivist epistemology, believing in the partiality of all knowledge – and as a consequence the politics of science; an issue to which I know turn in relation to the weaving of personal and professional stories of energy.

Research does not merely report objective facts and factors about energy demand within our homes and workplaces; rather it is actively involved in creating, sustaining, and at times challenging, dominant narratives and discourses around society's engagement with energy. Science is neither a neutral observer nor a conveyor of a singular 'truth' [4], being structured instead by disciplinary training, by academic career imperatives of publishing and 'impact' creation, and by shifting funding foci and opportunities. Viewing research as a socially, culturally and politically constructed process allows the field of Science and Technology Studies (STS) to explore the mechanisms and relationships which sustain science and the authority of scientific expertise in wider society [5,6,7]. Anthropologists and other social scientists seek to understand the role of professionals, including researchers, and their power to (re)create particular material conditions based on discursive disciplinary claims and associated 'evidence' [8,9,10]. Critical scholarship draws attention to the dominance of particular disciplines within various fields – for example the elitism associated with engineering and economics in energy research, and the associated exclusion of the wider social sciences; as much debated within this journal [11,12,13,14,15,16,17].

A shift towards valuing a plurality of disciplinary knowledges and methodological approaches *is* evident within the progression and focus of research on energy demand, although some would suggest it has not yet gone far enough. Research which seeks to help reduce and manage the demand for energy within our homes and workplaces has since the 1970's been dominated by a positivist energy efficiency paradigm focused on a physical-technical-economic model (PTEM) of energy demand

reduction [13,12,18]. Prevailing narratives in academia, policy and industry converge on the utility of interventions and (increasingly) digital technologies to help building users to understand their energy consumption and reduce it through changes in their behaviour; for example through the roll-out of smart-meters to monitor domestic energy use in many Western countries. Critics of such attitude-behaviour-choice or 'ABC' approaches [19] point however to their simplistic assumptions about the relationship between knowledge, attitudes and behaviour, suggesting that they fail to account for either contextual factors or the socio-technical nature of energy demand [20]. Rather than focus on knowledge alone i.e. on energy literacy [21,22], others draw attention to its interplay with energy know-how [2,23] and the importance of relational experiences of trust in the provision of information on energy [24]. Many draw on theories of social practice to provide a nuanced understanding of everyday 'practices-that-use-energy' [25,26,27], hoping they will counter the 'smart utopia' offered up through increasingly ubiquitous smart energy technologies [27]. Yet others draw our attention to the partial and political ways in which the public is invited to participate in research on issues such as energy demand, calling for an opening-up of opportunities to include lay knowledge and the public in more reflexive and transformative ways [3,28,29].

Whilst much energy research focuses on how to better engage building occupants in energy-saving behaviours, some researchers focus their attention on the role and responsibilities of those involved in the design, installation and policy of energy technologies and interventions [30,31,32,33,34,35]. Janda and colleagues for example seek to shift our research frame upwards from a 'bottom-up' focus on individual homeowners, tenants, businesses and employees; and downwards from a 'top-down' focus on utilities, regulations and government, to a middle-ground, for a 'middle-out' approach focused on building professionals and practitioners [36]. They outline the multiple ways in which these actors facilitate and support shifts in building performance, cautioning however that if their "role is left unexamined and unplanned, these groups have the potential to disable (rather than enable) carbon reduction targets in the built environment" (36, p.43). In related work Moezzi and Janda [18] describe how building professionals hailing from different disciplinary perspectives employ different sets of assumptions and explanations of energy use, leading them to pursue different paths of action or research, which in turn leads them to recommend different sets of strategies and policies. Others have conducted more grounded investigations, examining the role played by installers of domestic energy and heating controls, and their ability through direct engagement with householders to help them make sense of their new technologies [34,37]. Interestingly, given the focus of this paper on the personal, Darby & Liddell [37] note that matching installers with householders in terms of ethnicity and language can facilitate that process of knowledge exchange.

It is not only the roles and responsibilities of these 'middle-actors' which deserve attention, but also those conducting research on energy technologies and interventions. One study which does this demonstrates that having a large personal carbon footprint (combining home energy consumption and travel-related energy) can greatly reduce the credibility of the work of climate researchers amongst the general public [38]. When such researchers are asking that public to change their behaviour, it is suggested that these advocates of energy conservation need to '*be the change that they wish to see*' [38 p.326, emphasis in original]. Ellsworth-Krebs et al. [39] pose a different challenge to energy researchers; specifically of building scientists, engineers and architects, which is to reflect on their own, often unspoken ontological beliefs, and to re-focus their conceptual and methodological attention on the 'home' – complete with all its social trappings and symbolic meaning – rather than

the ‘house’ and merely its physical attributes and materiality. This echoes the sentiments of Moezzi and Janda [18] who point to the importance of our disciplinary assumptions in shaping ‘what we believe to be possible’ (p.31) and thus what we attempt to contribute through our research.

Whilst I sympathise with the argument of Attari et al. [38], my interest in this paper is not in whether energy researchers ‘talk-the-talk’ and ‘walk-the-walk’, i.e. if they are efficient users of energy in their personal lives. Rather I aim to build on the work of Moezzi and Janda [18] and Ellsworth-Krebs et al. [39] by suggesting that part of reflecting on our ontological and epistemological assumptions necessitates a consideration of our own personal experiences and engagement with energy in our homes and workplaces i.e. our own personal energy stories. Mourik [40, p.1] bemoans that those involved in developing smart energy technologies need to be ‘listening to, observing and speaking with potential clients, understanding how they live, what they need’; but surely those developers are also in some ways *their own* ‘potential clients’, in their own homes and workplaces? Surely they also listen to and observe their friends and family for instance in their domestic energy practices and interaction with energy technologies? I am not for one minute suggesting that the knowledge and perspectives this gives them *negates* the need for science or for academic research – the specific personal experiences of researchers may take them *further away* from their generalised users, rather than *closer to* them – but either way, I believe examining this relationship has significance for energy demand research. Part of that examination includes a consideration of the value of so-called anecdote and relatedly, issues of representativeness; issues to which this paper now turns.

‘Anecdote’ and representativeness in research

Not all research fields provide for both personal experience of and professional dealings with the issue in question; I imagine for example that few development scholars have lived in poverty, or that few studying prison reform have been incarcerated themselves. However *all* researchers involved in building energy demand, whatever their disciplinary training or research focus, enjoy direct experience of energy demand in their own homes and workplaces, and indirectly through those of their friends and families. As mentioned above, this does not of course mean that all energy researchers automatically understand the perspectives of all other domestic and non-domestic energy users. Strengers [46] is concerned by the fact that ‘[a]nyone, it would seem, can do social research’, with physical scientists and engineers able to ‘speak human’ simply by virtue of being human. She bemoans the ‘death of expertise’ implied by the attention given to so-called ‘anecdotes’ from peoples own life experiences, arguing persuasively that ‘talking to grandma isn’t social science’. As a qualitative social scientist, I have a great deal of sympathy for Strengers’ point of view however I offer an alternative interpretation of the situation. Strengers’ concerns centre on the side-lining of the social sciences – and particularly of in-depth qualitative approaches – in energy research, reflecting a far broader and widely shared unease with a politics of knowledge, which I mention above and return to in more depth below. For now, I highlight that so-called anecdotes remain powerful through being meaningful to large sections of society; and that as researchers we cannot escape our membership of society and so too can be influenced by them. Rather than dismiss anecdotes and seek to diminish their influence in the search for some ‘objective’ or ‘truthful’ science, I suggest we should rather accept their pervasiveness and seek to explore and learn from their significance in people’s interactions with energy – and in our own research practices. Simcock et al. [24] highlight that for energy-saving information to be effective in altering practices, it is best coming from a trusted source, for example from family or friends. So-called anecdotes i.e. personal stories and experiences, will no doubt form a

large part of such conversations, suggesting a need to focus *more* attention on such lay knowledge, rather than less.

I suggest that researchers' personal stories of energy are problematic for scientific practice only if we allow them to sub-consciously influence research design and execution. Providing high quality methodologies is essential in any scientific work and we should be able to explain and justify our methodological and analytical choices based on accepted best-practice within our fields – not based on unquestioned assumptions stemming from our own experiences. If our personal anecdotes, experiences and stories of energy are openly discussed with our colleagues however, and their relevance to our research debated and documented as part of a transparent research process, then I propose that this can only *improve* research practice, rather than diminish or denigrate it.

To ensure that research does *not* end up just being 'talking to grandma' [cf. 46], issues of generalisability and representativeness must be addressed. Firstly, by taking seriously our own experiences with energy we may be in danger of assuming that these are somehow universally shared amongst wider society, and thus we may design research or conduct fieldwork which inadvertently leads to bias arising from applying inappropriate mental models i.e. falling into the trap of 'confirmation bias' [47]. For example, the majority of researchers – highly educated and relatively well-paid professionals – may well have little direct experience of the life of those living in fuel-poverty, thus researchers' own experiences may have little relevance to their research if it focuses on energy demand amongst the fuel poor. Of course personal experience is only one influence amongst many in research decision-making – we can all read about fuel poverty or spend time with those in fuel poverty and we all have the capacity to be empathetic. My point is rather that in taking our personal stories of energy seriously we *do* need to take care in assuming that this necessarily brings us *closer to* our research participants. We may also imagine a scenario in which computer scientists and engineers clearly *get* the energy technologies, such as IHDs, which they are developing and thus inadvertently assume that they will automatically make sense to wider society. In fact, it is not uncommon for smart energy technologies, developed by 'smart men (let's be honest, most of them are male)' [40] to be tested in-house by other 'smart men' (K. Buchanan personal communication). I return to this subject below when discussing how we might reflect on our personal stories of energy in a conscious and productive way.

Secondly, we run the risk of *ignoring* our own experiences and assuming that we are *not* like our research participants in how they manage energy demand interventions or technologies. My empirical research on this topic [1] reveals how researchers who consider themselves a part of their case-study population in terms of social status and housing (and thus ability to shift their energy use), demonstrate some degree of scepticism over the ability of the In-home Displays (IHDs) with which they were experimenting to bring about sustained reductions in domestic energy use; "*I mean, it's quite informative but you don't want to really change your habits, like it's very difficult for someone say, that takes a shower for 10 minutes to change that because, you know, the system tells you*", and "*I think also you start out caring more and then, you know, you kind of get used to the whole thing…probably the changes you make just either…I suspect I've just gone back to using exactly what I did initially*". As stated previously, I am not interested in whether energy researchers 'talk-the-talk-and-walk-the-walk' or in pointing blame, but that such personal experiences of energy demand technologies do not appear to influence the direction of research is intriguing.

In the examples above we see a number of different ways in which personal stories of energy interact with professional stories. Firstly, we see how personal stories may be taken as representative of wider society when in fact they are not. Secondly we see how personal stories may be ignored when in fact they may be representative of some wider trends amongst society. This seems to mirror the Type I errors (when a hypothesis is accepted but is in fact untrue) and Type II errors (when a hypothesis is rejected but is in fact true) which plague statistical testing [48]. Whichever direction the 'error' occurs in, there is clearly a need to focus attention on the ways in which personal stories of energy become woven, consciously or subconsciously, into energy demand research and the impacts of this for the generalisability of our work. When conducting quantitative research, levels of probability associated with our statistical tests confer the confidence with which we can generalise from our studies to a wider population. In qualitative social science this is not possible and instead we employ 'analytic generalisation' [49] whereby we aim not to make predictions to wider society, but rather to propose issues and questions which we may wish to explore in other similar situations and through theory. I suggest that when considering the value of anecdote, we should perhaps see this as aligned with its ability to inspire 'analytic generalisation', rather than seeing it as being able to make specific predictions about wider society. Others suggest that whilst science (conceptualised as a positivist science) is able, for example, to test relationships and causal effects with great accuracy and precision that forms of lay knowledge may be better placed to propose the hypotheses to be tested [50]. Perhaps this is also part of the value of anecdote, to help narrow – or indeed widen – our research focus?

Finally, personal stories can also inspire. Reflecting on her attendance at a seminar in the US by bell hooks (renowned African American author, feminist scholar and social activist), Domosh [51] deliberates the value of 'the personal', sharing that bell hook's seamless interweaving of large-scale political issues with instances in her own personal life made stories of power and hegemony 'come to life and take on political sense' (p.81). Although some of her colleagues were critical of bell hooks' use of what they saw as 'anecdotal' information, Domosh [51] links this to a politics of knowledge around what is seen to count – and *not* count – in mainstream science. Feminist scholars have long argued the need to make gendered and everyday, embodied accounts of society, economics and the environment far more visible in both research and policy [52,53,54,55], including through the use of story, as illustrated within this Special Issue. Sharing our own personal experiences may combat the temptation to conceive of our research subjects as distant 'others' and may encourage us to value the mundane and the everyday. But how *do* we share our experiences and make connections to those whom our research aims to represent and assist? My response to this question forms the third and final section of this paper which considers how we can productively reflect on our personal stories of energy in our professional research.

Reflexive research and creative contributions

It has been suggested that science 'frequently incorporates and is shaped by implicit models of user-situations and social practices whose correspondence or not with the empirical situation affects its validity and public legitimacy' and that science 'has itself encouraged public scepticism, alienation and mistrust' through its 'own lack of reflexive openness' [59 p.334, 329]. Others suggest that not only should science be more reflexive, but that we should also pay attention to our emotions, as 'emotions, such as empathy and sympathy among learners, might stimulate new ways of thinking and seeing across difference' [60 p.222]. Our personal stories of energy demand provide us with direct experience

of ‘user-situations’, from which to build research with heightened public legitimacy. At the same time, our stories and those of our friends and family may well offer emotional connections to others, potentially stimulating innovative thinking and research.

One way in which we may practically encourage reflexive learning as researchers is by directly experiencing the energy technologies or interventions which our research explores or develops – if they are not already a part of our lives. This is a practice referred to as ‘dogfooding’ in the design industry and it would appear that many energy demand projects do so, testing the technologies they are developing in researcher homes to ensure they work in the ‘real-world’ before being deployed more widely in case-study homes and beyond [1]. The Creating the Energy for Change (C-tech) project[1] for example did this and on finding that the data was putting their private habits (such as length of showering) on public display (i.e. within the research team) and personally experiencing the controversial nature of this, they shifted their project focus in order to understand the consequence of these unexpected social influences [61]. This is a great example of avoiding ‘sunk cost bias’ (whereby projects are continued after initial investment, even if progress is poor and ideally they should be terminated [47]), and highlights the importance of learning from when things don’t go as planned – just as Janda and Topouzi [62] urge us to do by paying attention to what they refer to as ‘learning stories’.

Reflexive learning, either from directly testing and experiencing energy technologies or interventions (a very explicit interweaving of personal and professional stories), or from our own personal stories of energy and those of our friends and families, can be facilitated throughout the lifetime of a research project (and into the next) by encouraging team sharing and reflection on this on a regular basis. Spending time together and getting to know each other is hugely important in any interdisciplinary venture [63] and regular team meetings are considered vital to successful energy demand research projects [64]. Making a conscious effort to reflect on personal stories of energy during team meetings and other activities provides a practical way in which we can promote epistemological pluralism. Those in policy are already doing this, for example staff in the UK’s Department for Business, Energy and Industrial Strategy (BEIS, formerly DECC) used a report by the World Bank on the biases of development professionals [47] as the basis for facilitated reflection on the potential influence of bias in their own work (A. Charlesworth *personal communication*). Some of us do not work as part of an extensive team however, but sharing personal stories with wider groups of colleagues or through individual blogs [69] also offer opportunities for reflexive learning. Such approaches have been used to promote energy literacy amongst University students, at the same time highlighting structural obstacles to increased energy efficiency, such as the position of many students as renters with very little control over the material fabric of their homes and therefore limited ability to deal with drafty windows or poor insulation for example [65, van der Horst & Staddon unpublished material]. We must not ignore either the structural influences which mould and manipulate opportunities for reflexive research. Funding opportunities, the imperative to publish, and the desire to work inter- or transdisciplinarily are all important, as are power relations within research teams based on seniority, discipline, gender, age and so on.

[1] http://www.energyforchange.ac.uk/

It may well be that encouraging reflexivity means embracing uncertainty [59] and I return to a quote from the opening paragraph of this paper, that 'doubt and contradiction rather than certainty are seen to be generative of social change' [66]. Facing the possible contradiction between our own grasp of energy interventions and those of the wider public, or specific groups within that, is of course a challenge but again I return to an earlier quote, that we should embrace 'that productive moment of friction where universals and particulars meet' [67, p.20]. The words of a participant from my empirical work [1]illustrate the importance of paying attention to our personal stories of energy however;

> "*I mean it can be quite helpful to use yourself as a case-study and test your own ideas on it, it makes sense to me. I think a lot of people don't actually do that very much; you hear things at* [academic] *presentations and, you know, it doesn't sound like it's going to work at all!*"

Clearly recognising the potential value of personal stories and experiences, and overcoming the uncertainty they generate and challenges they pose to on-going research practice, are two different things. But learning is a continual process, and thus even if sunk-cost bias – or an understandable desire to protect our professional reputation – inhibit our use of personal experiences within one piece of research, they can be 'carried over' and incorporated into future projects. In discussing ethical commitment in geography research and teaching, Valentine [68, p.486] states that we need to 'teach students to handle the dialectic between doubt and certainty as part of their moral development', and of course the same is true of ourselves when conducting research. Kearns et al. [70] point to the social relations of research and the 'interactive ethics' that emerge, whilst others point to the 'politics of accountability' [42] which demand that as researchers we are accountable not only to the funders of our work, but also its 'beneficiaries'. By more explicitly recognising and accounting for our own personal stories of energy within our research, I believe we can improve the accountability of our work to society. It will also help to develop an ethics of research which encourages acceptance of its partiality, a practice of pluralism, and thus opportunities to move beyond dominant discourses in policy, industry and academia of what is necessary in order to reduce the demand for energy in our buildings.

Conclusions

This commentary paper focused its attention on two forms of energy demand story – that which we tell through our research and that arising from our own personal lives and experiences. It was interested in the interweaving of these (in both theory and practice) and the consequences of that for the future of energy demand. Whilst increasing research attention is given to the agency of 'middle-actors' such as buildings professionals and to policy-makers and researchers [36,39,40,62], very little of that has turned the spotlight on 'personal' experiences and anecdotes of energy demand. Of course the personal and the professional is a somewhat false dichotomy to draw, and focusing on the more holistic notion of our positionalities (reflecting our gender, race, age, seniority, discipline, job etc.) offers a far more productive channel through which to reflect on some of the myriad influences in the design, execution and dissemination of our research. Clearly some research teams take the time and effort to consciously reflect on personal experiences, using them to craft more creative research projects – 'creative' in that they deal head-on with complexity and uncertainty [61]. Reflecting on our personal stories of energy helps us to see how we are positioned *vis a vis* wider society, or groups within that, and whether our own experiences align us with certain types of people (such as those who easily grasp digital technologies) or not. This paper discusses issues of generalisability and representativeness of research emerging from such subject positions.

It has been argued that energy researchers should 'be the change they want to see' [38]. The argument of this paper is less normative and less radical than that. This paper simply suggests that we should recognise and pay explicit attention to the relationship between the stories of energy we experience in our own homes and workplaces, and those we tell through our research. Whilst reflecting on our personal energy stories is inherently an individual task, there is a common effort involved in accounting for these in our professional energy stories. It is my assertion that this will facilitate and enable a more creative approach to understanding energy demand, and hopefully shift – even slightly – the normative and practical goal posts in our combined attempts to craft a sustainable and just energy system.

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